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10/675,858	09/30/2003	Masahiro Minowa	9319H-000561	4622
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/675,858

Applicant(s)

MINOWA, MASAHIRO

Examiner

Neil R. McLean

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 March 2008.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 12-16 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-9 and 12-16 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/28/2008 has been entered.

Status of Claims

2. Claims 1-9 and 12-16 are now pending in this application.

Response to Arguments

3. Applicant's arguments, see Page 9, lines 14-19 of Applicant's Remarks filed 3/28/2008, with respect to the rejection(s) of claim(s) 1 and 13, under 35 U.S.C. 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of newly found prior art.

Regarding Applicant's Argument:

"...both independent claims 1 and 13 call for the image data to be superposed on the payment transaction print data. More particularly, in Goring, the graphic is printed on the receipt as shown in Figs. 2 and 3, but the graphic is not superposed on the payment transaction print data as claimed".

Examiner's Response:

Goring and Okamoto do not disclose expressly printing the image data so that the image data is superposed on the payment transaction print data.

Ito (US 4,584,573) discloses printing the image data so that the image data is superimposed on the print data (Referring to Figure 11; The background pattern and the character pattern are **superimposed on each other**, and the output signal of the AND gate 38 is applied to the OR gate 16 where the background pattern data is combined with the character pattern data, and the composite signal is applied to the dot matrix printer 12 as described in Column 5, lines 31-52).

Ito, Goring and Okamoto are combinable because they are from the same field of endeavor of image processing; e.g., all references combine separate sources of data to attain a composite image.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to print the image data so that the image data is superimposed on the print data.

The suggestion/motivation for doing so would be to provide a system which can control the printing of e.g., a background pattern or graphic combined with a character pattern. It is desirable to combine graphics and text in a variety of ways to create an appealing and effective document for e.g., a presentation or report.

Therefore, it would have been obvious to combine Ito with Goring & Okamoto to obtain the invention as specified.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-9, and 12-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goring (US 2002/0077892) in view of Okamoto (US 4,985,850) and further in view of Ito (US 4,584,573).

Regarding Claim 1:

Goring discloses a method of controlling a printing apparatus having stored therein in advance predetermined image data so as to correspond to payment transaction print data ([0009], lines 1-2) generated based on input information concerning merchandise sales ([0009], lines 2-3), the printing apparatus being arranged to print the predetermined image data by adding the image data upon receipt of the payment transaction print data by the printing apparatus, said method comprising the steps of:

obtaining the payment transaction print data ([0018], lines 1-6);

retrieving a predetermined character string ([0018], lines 10-12) indicative of a print position of the image data to be printed from the payment transaction print data;

(Note: It is inherent that character information in a code format, e.g., a character string which has been transmitted/retrieved from an external apparatus such as a host computer or the like and is received by a data input unit, for instance, an interface, is converted into dot information in a bit image format. Such a procedure is well known in the art.)

adding the image data to the payment transaction print data (FIG. 2 illustrates a coupon/receipt printed with a fixed graphic based on the obtained location ([0019]) so as to print the image data with a position specified by location serving as a reference ([0018], lines 6-9) to obtain, a synthesized print result;

Goring does not disclose expressly wherein the printing apparatus stores in advance predetermined image data based on input information and a printing apparatus being arranged to print the predetermined image data by adding the image data upon receipt of the print data by the printing apparatus; and

obtaining a line number specified by the retrieved predetermined character string;

Okamoto discloses wherein the printing apparatus stores in advance predetermined image data (e.g., RAM's 102a and 102b in Figure 7) based on input information (Column 3, lines 36-44) and a printing apparatus being arranged to print the predetermined image data by adding the image data upon receipt (e.g., Figures 8A-8D

show how contents of the respective RAM's are combined) of the print data by the printing apparatus; and

obtaining a line number specified by the retrieved predetermined character string (Column 5, lines 23-28);

Goring & Okamoto are combinable because they are from the same field of endeavor, image processing; e.g., printing and configuring image data.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have a printing apparatus that stores in advance predetermined image data based on input information and a printing apparatus that is arranged to print the predetermined image data by adding the image data upon receipt of the print data by the printing apparatus.

The suggestion/motivation for doing so is to have a printing system which has the ability to produce customized information, wherein a customized image is merged with other standardized information and printed or displayed is a desirable feature when producing any kind of document. This allows the user to determine the exact appearance of a document.

Therefore, it would have been obvious to combine Okamoto's method of storing and combining print information with Goring's method of printing a receipt to obtain the invention as specified in claim 1.

Goring and Okamoto do not disclose expressly printing the image data so that the image data is superposed on the payment transaction print data.

Ito discloses printing the image data so that the image data is superimposed on the print data (Referring to Figure 11; The background pattern and the character pattern are superimposed on each other, and the output signal of the AND gate 38 is applied to the OR gate 16 where the background pattern data is combined with the character pattern data, and the composite signal is applied to the dot matrix printer 12 as described in Column 5, lines 31-52).

Ito, Goring and Okamoto are combinable because they are from the same field of endeavor of image processing; e.g., all references combine separate sources of data to attain a composite image.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to print the image data so that the image data is superimposed on the print data.

The suggestion/motivation for doing so would be to provide a system which can control the printing of e.g., a background pattern or graphic combined with a character pattern. It is desirable to combine graphics and text in a variety of ways to create an appealing and effective document for e.g., a presentation or report.

Therefore, it would have been obvious to combine Ito with Goring & Okamoto to obtain the invention as specified in Claim 1.

Regarding Claim 2:

Goring further discloses a method according to claim 1, further comprising the steps of:

generating an image addition setting command based on the obtained location ([0020]); and

transmitting the payment transaction print data and the image addition setting command to the printing apparatus ([0022]);

wherein the printing apparatus adds the image data to the payment transaction print data based on a result of analysis of the image addition setting command ([0019]).

Regarding Claim 3:

Goring further discloses a method according to claim 2, wherein the predetermined character string is a start character string indicative of a position to start addition of the image data ([0020]); and

wherein, in the step of obtaining the location, a location specified by the start character string is obtained ([0018], lines 14-22).

Regarding Claim 4:

Goring further discloses a method according to claim 2, wherein the predetermined character string is made up of a start character string indicative of a position to start addition of the image data, and an end character string indicative of a position to end addition of the image data ([0021]);

wherein, in the step of obtaining the location, a plurality of location to be specified by the start character string and by the end character string are obtained ([0021]).

Regarding Claim 5:

Goring further discloses a method according to claim 4, wherein the printing apparatus has stored therein a plurality of image data files which are files of the image data ([0014]). the method further comprising the steps of:

storing (See Image Database 200 in Figure 1) a definition table ("Other storage structures may be employed, such as a linking **table**") in which the start character string and the end character string are correlated with image designation data for designating an image data file out of a plurality of image data files stored in the printing apparatus ("Once the image information is stored, either **locally** or through a Universal Resource Locator (URL) also known as an Internet address, an image database 200 may be established"; and

obtaining, from the definition table, image designation data which are related to the extracted start character string and the end character string, wherein, in the step of generating the image addition setting command, the image addition setting command is generated on the basis of the obtained location and the image designation data ([0017]).

Regarding Claim 6:

Goring further discloses a method according to claim 4, further comprising the step of setting at least one of the start character string and the end character string ([0021]).

Regarding Claim 7:

Goring further discloses a method according to claim 6, further comprising the step of setting image designation data in which the image designation data are set in correlation with at least one of the start character string and the end character string to be set in the step of setting the character string ([0018], lines 14-22);

Regarding Claim 8:

Goring further discloses a method according to claim 4, further comprising the step of setting the location in which, in the step of obtaining the location, setting is made as to which is obtained between the location in the start character string and the location which is one line below the start character string, and setting is made as to which is obtained between the location in the end character string and the location which is one line above the end character string ([0018], lines 14-22);

Regarding Claim 9:

Goring discloses all the limitations of Claim 2; however

Goring does not disclose expressly wherein the printing apparatus is capable of performing color printing, the method further comprising the step of setting a printing color of the image data, wherein the image addition setting command includes a parameter showing the printing color.

Okamoto discloses wherein the printing apparatus is capable of performing color printing (Column 2, lines 54-57; See Figure 1), the method further comprising the step of setting a printing color of the image data (e.g., Colors stored in RAM a and RAM b

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described on Column 2, lines 58-68), wherein the image addition setting command includes a parameter showing the printing color (Column 3, lines 39-44).

Goring & Okamoto are combinable because they are from the same field of endeavor, image processing; e.g., printing and configuring image data.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have a printing apparatus and setting command capable of color printing.

The suggestion/motivation for doing so would be to enhance the clarity and display of the text and images. Some customers prefer to see ads in color, and colors may compel people to read ads and take note of the advertisement.

Therefore, it would have been obvious to combine Okamoto's color printer with Goring's method of printing a receipt to obtain the invention as specified in claim 9.

Regarding Claim 10:

Cancelled

Regarding Claim 11:

Cancelled

Regarding Claim 12:

Goring teaches a printer driver for enabling a computer to execute the steps of the method of controlling a printing apparatus according to claim 1.

Note: A device driver is an **inherent feature** that allows a computer to control printers, displays, disk drives, CD-ROM readers and so on in order to convert the more general input/output instructions of the operating system to messages that the device type can understand.

Regarding Claim 13:

Goring discloses a printing apparatus which stores receipt print data ([0009], lines 1-2) by adding image data ([0009], lines 1-2) to payment transaction print data ([0018], lines 1-6) generated by a host computer based on input information concerning merchandise sales, the printing apparatus comprising:

means for storing the image data (The program code or device which performs the function described in [0017];

means for obtaining the payment transaction print data from the host computer data (The program code or device which performs the function described in [0018], lines 1-6);

means for obtaining from the host computer an image addition setting command for printing with the image data being added (The program code or device which performs the function described in [0020]);

means for analyzing the image addition setting command to thereby obtain a location indicative of a print position of the image data (The program code or device which performs the function described in [0020]);

means for generating the receipt print data by adding the image data to the payment transaction print data based on the location (The program code or device which performs the function described in [0019].

Goring does not disclose expressly wherein the printing apparatus stores in advance predetermined image data based on input information and a printing apparatus being arranged to print the predetermined image data by adding the image data upon receipt of the print data by the printing apparatus; and

obtaining a line number specified by the retrieved predetermined character string;

Okamoto discloses wherein the printing apparatus stores in advance predetermined image data (e.g., RAM's 102a and 102b in Figure 7) based on input information (Column 3, lines 36-44) and a printing apparatus being arranged to print the predetermined image data by adding the image data upon receipt (e.g., Figures 8A-8D show how contents of the respective RAM's are combined) of the print data by the printing apparatus; and

obtaining a line number specified by the retrieved predetermined character string (Column 5, lines 23-28);

Goring & Okamoto are combinable because they are from the same field of endeavor, image processing; e.g., printing and configuring image data.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have a printing apparatus that stores in advance predetermined image data based on input information and a printing apparatus that is arranged to print the

predetermined image data by adding the image data upon receipt of the print data by the printing apparatus.

The suggestion/motivation for doing so is to have a printing system which has the ability to produce customized information, wherein a customized image is merged with other standardized information and printed or displayed is a desirable feature when producing any kind of document. This allows the user to determine the exact appearance of a document.

Therefore, it would have been obvious to combine Okamoto's method of storing and combining print information with Goring's method of printing a receipt to obtain the invention as specified in claim 13.

Goring and Okamoto do not disclose expressly printing the image data so that the image data is superposed on the payment transaction print data.

Ito discloses printing the image data so that the image data is superimposed on the print data (Referring to Figure 11; The background pattern and the character pattern are **superimposed on each other**, and the output signal of the AND gate 38 is applied to the OR gate 16 where the background pattern data is combined with the character pattern data, and the composite signal is applied to the dot matrix printer 12 as described in Column 5, lines 31-52).

Ito, Goring and Okamoto are combinable because they are from the same field of endeavor of image processing; e.g., all references combine separate sources of data to attain a composite image.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to print the image data so that the image data is superimposed on the print data.

The suggestion/motivation for doing so would be to provide a system which can control the printing of e.g., a background pattern or graphic combined with a character pattern. It is desirable to combine graphics and text in a variety of ways to create an appealing and effective document for e.g., a presentation or report.

Therefore, it would have been obvious to combine Ito with Goring & Okamoto to obtain the invention as specified in Claim 13.

Regarding Claim 14:

Goring discloses all the limitations of Claim 2; however

Goring does not disclose expressly wherein the printing apparatus is capable of performing color printing, the method further comprising the step of setting a printing color of the image data, wherein the image addition setting command includes a parameter showing the printing color.

Okamoto discloses wherein the printing apparatus is capable of performing color printing (Column 2, lines 54-57; See Figure 1), the method further comprising the step of setting a printing color of the image data (e.g., Colors stored in RAM a and RAM b described on Column 2, lines 58-68), wherein the image addition setting command includes a parameter showing the printing color (Column 3, lines 39-44).

Goring & Okamoto are combinable because they are from the same field of endeavor, image processing; e.g., printing and configuring image data.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have a printing apparatus and setting command capable of color printing.

The suggestion/motivation for doing so would be to enhance the clarity and display of the text and images. Some customers prefer to see ads in color, and colors may compel people to read ads and take note of the advertisement.

Therefore, it would have been obvious to combine Okamoto's color printer with Goring's method of printing a receipt to obtain the invention as specified in claim 14.

Regarding Claim 15:

Goring teaches a merchandise sales data processing apparatus having the printing apparatus according to Claim 13; and

a host computer which controls the printing apparatus ([0026]) by transmitting the payment transaction print data and the image addition setting command to the printing apparatus, wherein the host computer comprises:

means for generating the payment transaction print data ([0026]);

means for retrieving a predetermined character string indicative of a print position of the image data to be printed from the payment transaction print data string (The program code or device which performs the function described in [0018]);

means for obtaining the location specified by the extracted predetermined character string (The program code or device which performs the function described in [0018]);

means for generating the image addition setting command based on the obtained location (The program code or device which performs the function described in [0020]);
and

means for transmitting the payment transaction print data and the image addition setting command to the printing apparatus (The program code or device which performs the function described in [0018]).

Regarding Claim 16:

Goring teaches a POS system comprising:

the merchandise sales data processing apparatus according to claim 15; and
a POS server ([0026], lines 1) for managing the merchandise sales data processing apparatus, the POS server being connected to the merchandise sales data processing apparatus through a network (service provider described in [0026]).

Regarding Claim 17:

Cancelled

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Parks et al. (US 5,025,396) teaches a method of merging an alphanumeric data stream with a digitized image file.

Examiner Notes

8. The Examiner cites particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested that, in preparing responses, the applicant fully considers the references in its entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or as disclosed by the Examiner.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Neil R. McLean whose telephone number is (571)270-1679. The examiner can normally be reached on Monday through Friday 7:30AM-5:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on 571.272.7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/Neil R. McLean/
Examiner, Art Unit 2625
4/23/2008

/Mark K Zimmerman/
Supervisory Patent Examiner, Art Unit 2625